

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 03/107033 A1

- (51) International Patent Classification⁷: **G01S 13/00**, 13/87
- (21) International Application Number: **PCT/SE03/00988**
- (22) International Filing Date: **13 June 2003 (13.06.2003)**
- (25) Filing Language: **Swedish**
- (26) Publication Language: **English**
- (30) Priority Data:
0201818-2 **14 June 2002 (14.06.2002)** **SE**
- (71) Applicant (for all designated States except US): **TOTALFÖRSVARETS FORSKNINGSINSTITUT** [SE/SE]; S-172 90 Stockholm (SE).
- (81) Designated States (national): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (regional): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **HERBERTHSON, Magnus** [SE/SE]; ~~Strömgatan 21, S-589 55 Linköping (SE).~~
- (74) Agent: **FÖRSVARETS MATERIELVERK**; Patentenheten, S-115 88 Stockholm (SE).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **METHOD FOR DETERMINING POSITIONS OF TARGETS BY BISTATIC MEASUREMENTS USING SIGNALS SCATTERED BY THE TARGETS**

(57) **Abstract:** The present invention relates to a method for determining the positions of targets by bistatic measurements using signals scattered by the targets. Also the velocities of the targets can be determined. The range of the transmitters is selected so that a target at an arbitrary point can be measured by scattering in the target by at least four cooperating measuring facilities. First the targets are associated. This occurs by calculating, in two independent ways, two sets of sums of distances between transmission points and targets and, respectively, targets and reception points. Subsequently, said two sums are sorted with respect to distance, compared with each other, and the sums that correspond with each other, while considering a margin of error that has been determined in advance, are stated to correspond to conceivable targets. The association of targets is improved and completed by corresponding calculations being carried out for Doppler velocities. Finally, the positions of the targets are calculated from a system of equations for the bistatically measured distances.

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